

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 04037-007001	Application No. 09/394,265
<b>Information Disclosure Statement</b> <b>by Applicant</b> (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant David E. Wolf	
		Filing Date September 10, 1999	Group Art Unit 1635



U.S. Patent Documents							
Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
88	AA	4,041,932	08/16/77	Fostick	128	2 G	
88	AB	4,071,020	01/31/78	Pugliese	128	2 A	
88	AC	4,330,299	05/18/82	Cerami	23	230 B	
88	AD	4,344,438	08/17/82	Schultz	128	634	
88	AE	4,401,122	08/30/83	Clark, Jr.	128	635	
88	AF	4,822,746	04/18/89	Walt	436	528	
88	AG	4,868,103	09/19/89	Stavrianopoulos, et al.	435	5	
88	AH	4,981,779	01/01/91	Wagner	435	288	
88	AI	5,001,051	03/19/91	Miller, et al.	435	6	
88	AJ	5,028,787	07/02/91	Rosenthal, et al.	250	341	
88	AK	5,101,814	04/07/92	Palti	128	635	
88	AL	5,143,066	09/01/92	Komives, et al.	128	634	
88	AM	5,244,636	09/14/93	Walt, et al.	422	82.07	
88	AN	5,320,814	06/14/94	Walt, et al.	422	82.07	
88	AO	5,326,531	07/05/94	Hahn, et al.	422	82.06	
88	AP	5,341,805	08/30/94	Stavridi, et al.	128	633	
88	AQ	5,342,789	08/30/94	Chick, et al.	436	501	
88	AR	5,460,971	10/24/95	Gottlieb	436	68	

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
88	AS	WO 90/10861	09/20/90	PCT	—	—	✓	
88	AT	0 561 653 A1	09/22/93	EPO	—	—	✓	
88	AU	WO 96/36275	11/21/96	PCT	—	—	✓	

Examiner Signature <i>Amelene R. Gabel</i>	Date Considered 11-18-00
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
JS	BA	Cunningham, Bruce A., et al., "Isolation and Proteolytic Cleavage of the Intact Subunit of Concanavalin A," <i>Biochemistry</i> , Vol. 11, No. 17, pp. 3233-39, (1972).
JS	BB	Gunther, Gary R., et al., "Concanavalin A Derivatives with Altered Biological Activities," <i>Proc. Nat. Acad. Sci. USA</i> , Vol. 70, No. 4, pp. 1012-16, April 1973.
JS	BC	Wang, John L., et al., "Binding and Functional Properties of Concanavalin A and Its Derivatives," <i>The Journal of Biological Chemistry</i> , Vol. 253, No. 9, p. 3000-07 (1978).
JS	BD	Tanaka, Isao, et al., "Monovalent Monomer Derivative of Concanavalin A Produced By Photochemically Induced Alkylation," <i>J. Biochem</i> , 89, pp. 1643-46 (1981).
JS	BE	Schultz, Jerome S., et al., "Affinity Sensor: A New Technique for Developing Implantable Sensors for Glucose and Other Metabolites," <i>Diabetes Care</i> , Vol. 5, No. 3, pp. 245-253 (1982).
JS	BF	Wilson, T., "Standard Oil patents probe potentially more selective than radioisotope tracers," <i>BioTechnology Newswatch</i> , pp. 3 and 4, (1983).
JS	BG	Parker, J.W., et al., "Glucose/Oxygen sensor," <i>Proceedings of SPIE - The International Society for Optical Engineering</i> , Vol. 713 Optical Fibers in Medicine II, pp. 113-120 (1986).
JS	BH	Heller, M.J., et al., "Fluorescent Energy transfer Oligonucleotide Probes, Federation Proceedings, Federation of American Societies for Experimental Biology," Vol. 46, No. 6, Abstract No. 248, May 1, 1987.
JS	BI	Morrison, Larry E., "Solution Hybridization Measurements Using Complementary Strands of Fluorescent DNA," <i>Gene Probe Technology II, The San Diego Conference</i> (1 pg) (November 4-6, 1987).
JS	BJ	Meadows, et al., "Fiber-Optic Biosensors Based on Fluorescence Energy Transfer," <i>Talanta</i> , Vol. 35, No. 2, p. 145-150 (1988).
JS	BK	Cardullo, Richard A., et al., "Detection of Nucleic Acid Hybridization By Nonradiative Fluorescence Resonance Energy Transfer," <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 85, pp. 8790-8794 (1988), <i>Biochemistry</i> .
JS	BL	Cardullo, R.A., et al., "Synthesis, Purification, and Characterization of 2,4,6-Trinitrophenyl-UDP-galactose; A Fluorescent Substrate for Galactosyltransferase," <i>Analytical Biochemistry</i> , Vol. 188, pp. 305-309 (1990).
JS	BM	Chien, Cheng-Ting, et al., "The Two-Hybrid System: A Method to Identify and Clone Genes for Proteins that Interact with a Protein of Interest," <i>Proc. Natl. Acad. Sci., USA</i> , Vol. 88, pp 9578-9782 (1991), <i>Biochemistry</i> .
JS	BN	McKinnon, Christine A., et al., "Cross-Linking a Maturation-Dependent Ram Sperm Plasma Membrane Antigen Induces the Acrosome Reaction," <i>Molecular Reproduction and Development</i> Vol. 29, pp. 200-207 (1991).
JS	BO	Kroschwitz, Jacqueline I., ed., "Biosensors," <i>Kirk-Othmer Encyclopedia of Chemical Technology</i> , Vol., 4, pp. 208-220 (1992).
JS	BP	Lakowicz, Joseph R., "Fluorescence Lifetime Sensing," <i>Laser Focus World</i> , Vol., 28, No. 5, pp. 60-62, 66-68, 70, 72, 75, 77-78 and 80, (1992).
JS	BQ	Naismith, James H., et al., "Refined Structure of Cadmium-substituted Concanavalin A at 2.0 Å Resolution," <i>Acta Crystallographica</i> , D49, pp. 561-571 (1993).

Examiner Signature

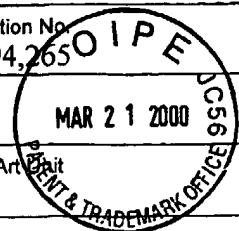
Smilene R. Ornel

Date Considered

11-18-00

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U.S. Patent Documents							
Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5,628,310	05/13/97	Rao et al.			
	AB						
	AC						
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Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AL							
	AM							
	AN							
	AO							
	AP							

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AQ	Oda et al., "Studies on the Specific Interaction of Concanavalin A and Saccharides by Affinity Chromatography. Application of Quantitative Affinity Chromatography to a Multivalent System" <i>J. Biochem.</i> , 89:285-296 (1981).
	AR	Becker and Reeke, "Specific Carbohydrate Binding By Concanavalin A and Favin" <i>Transactions of the ACA</i> , 25:37-50 (1989).
	AS	Saito et al., "A Role of Valency of Concanavalin A and Its Chemically Modified Derivatives in Lymphocyte Activation" <i>J Biol. Chem.</i> , 258:7499-7505 (1983).
	AT	Schwarz et al., "Thermodynamics of Monosaccharide Binding to Concanavalin A, Pea ( <i>Pisum sativum</i> ) Lectin, and Lentil ( <i>Lens culinaris</i> ) Lectin" <i>J. Biol. Chem.</i> , 268:7668-7677 (1993).

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# **Notic of References Cited**

Application/Control No.

09/394,265

Examiner

Gailene R. Gabel

Applicant(s)/Patent Under  
Reexamination  
WOLF, DAVID E.

Art Unit

1641

Page 1 of 1

## **U.S. PATENT DOCUMENTS**

*		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	DOCUMENT SOURCE **	
							APS	OTHER
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<input type="checkbox"/>	B						<input type="checkbox"/>	<input type="checkbox"/>
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## **FOREIGN PATENT DOCUMENTS**

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								APS	OTHER
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## **NON-PATENT DOCUMENTS**

*		DOCUMENT (Including Author, Title Date, Source, and Pertinent Pages)	DOCUMENT SOURCE **	
			APS	OTHER
<input type="checkbox"/>	U	Cho et al., Galectin-1: Oligomeric structure and interactions with poly lactosamine, Trends in Glycoscience and Glycotechnology, 9(45): 47-56 (January 1997), Abstract.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	V	Lakowicz et al., Optical Sensing of glucose using phase modulation fluorimetry, Analytica Chimica Acta 271: 155-164 (1993)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	W	Mandal et al., Differences in the binding affinities of dimeric con A and tetrameric con A with large oligomannose-type glycoproteins, Biochemistry 32(19): 5116-5120 (May 1993).	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	X	Stubbs et al., Production of pea lectin in E. coli, Journal of Biological Chemistry, 261(14): 6141-6144 (1986), Abstract.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

\*A copy of this reference is not being furnished with this Office action. (See Manual of Patent Examining Procedure, Section 707.05(a).)

\*\*APS encompasses any electronic search i.e. text, image, and Commercial Databases.

U.S. Patent and Trademark Office

PTO-892 (Rev. 03-98)

Notic of References Cited

Part of Paper No. 8

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Patent and Trademark OfficeAttorney's Docket No.  
04037-007001Application No.  
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by Applicant**

(Use several sheets if necessary)

(37 C.F.R. § 1.98(b))

Applicant  
David E. WolfFiling Date  
September 10, 1999Group Art Unit  
1641**U.S. Patent Documents**

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
88	AA	6,232,130	05/15/01	Wolf			
	AB						
	AC						
	AD						
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	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

**Foreign Patent Documents or Published Foreign Patent Applications**

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							Yes	No
	AL							
	AM							
	AN							
	AO							
	AP							

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	AR	
	AS	
	AT	

Examiner Signature

*Amelore B. Gabel*

Date Considered

10/14/03

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